

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 04016509

PUBLICATION DATE : 21-01-92

APPLICATION DATE : 02-05-90

APPLICATION NUMBER : 02115176

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INT.CL. : C01B 33/34 H01L 23/08

TITLE : PRODUCTION OF ZEOLITE COMPOSITION

ABSTRACT : PURPOSE: To easily produce the stabilized-quality zeolite composition having a specified content of B by bringing an alkaline-earth metal type zeolite of specified composition into contact with  $B_2O_3$  in the presence of water and drying the product without separating water.

CONSTITUTION: An alkaline-earth metal type zeolite shown by the general formula of  $(kM^1O.pM^2O.qM^3O).lAl_2O_3.mSiO_2.nH_2O$  ( $M^1$  and  $M^2$  are different alkaline-earth metal ion,  $M^3$  is an alkali metal or ammonium ion,  $k+p+q=1$ ,  $p/k=0.05$  to  $1$ ,  $q=0$  to  $0.15$ ,  $l=0.9$  to  $1.1$ ,  $m=1.5$  to  $2.5$ ,  $m/l \leq 3$  and  $n \geq 0$ ) or the calcination product is used as the raw material. The raw material and boron oxide such as  $B_2O_3$  or boric acid, etc., capable of forming boron oxide by calcination is mixed with water. The water is preferably controlled to about pH8-12. The mixture is dried as such without separating water. A stabilized-quality zeolite composition with its B content strictly controlled is obtained in this way. The composition is sintered at relatively low temp. to obtain a high-density sintered alkaline-earth metal aluminosilicate.

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